

AMENDMENT TO THE CLAIMS

1-5. (Canceled)

6. (Original) A method of cleaning a plurality of impactor components having impaction surfaces which are enclosed, including providing a manifold for injecting liquid into an enclosure, including the impaction surfaces, draining the liquid after washing, and providing a drying fluid to the enclosure for a plurality of such impaction surfaces simultaneously while held in a common carrier.

7. (Original) The method of claim 6, wherein the impaction surfaces are part of a cup shaped component, and sealing the cup shaped device relative to a manifold carrying ducts for introducing liquid, providing a drain, and introducing drying fluid.

8. (Original) The method of claim 6, including providing a manifold having passageways for liquid and gas leading to each of the impaction surfaces.

9-14. (Canceled)

15. (Currently Amended) ~~An~~ ~~The~~ apparatus for aiding in the dissolution of ~~of~~ claim 23 wherein the cup impactor devices hold particles held on impaction surfaces ~~of the cup impactor devices~~, after the particles have been classified as to size in an impactor, ~~further comprising a support having a plurality of receptacles for receiving components having impaction surfaces~~ ~~the tray and cup impactor devices~~ carrying the particles, said support being mounted for movement, and ~~the support having~~ an overlying cover ~~on the support over the tray and cup impactor devices~~, the cover including

openings for introducing a solvent to immerse each of the impaction surfaces.

16. (Currently Amended) The apparatus of claim 15, wherein said cup impactor devices comprise individual impactor cups, and wherein said support holds individual impactor cups having the impaction surfaces on the interior thereof, and a clamp to clamp the cover against the cups in position in receptacles of the support.

17. (Currently Amended) The apparatus of claim 15, wherein each of the cups has a flange around the periphery thereof, a-the tray having openings to permit permitting a majority of the cup to pass through the openings and so the tray supports the cup on the flange, the support having openings in an upper surface for supporting the tray with the cups protruding into the openings receptacles of the support, the cover engaging the flanges of the cups and holding the cups, the tray, and the support as a unit.

18. (Original) The apparatus of claim 17 and seals around the cups engaging the flange and sealing the cups relative to the cover.

19. (Original) The apparatus of claim 18, wherein the cover has a plenum chamber open to each of the cups.

20. (Original) A sample recovery station for recovering samples from a plurality of impactor surfaces having classified particles on the surfaces, comprising a support frame having a plurality of openings, a tray for supporting a plurality of cups with portions of the cups protruding from the plane of the tray, the support having a surface holding the tray with the cups in position in receptacles in the support, a manifold cover held relative to the support and including recesses overlying each of the cups, a vial holding bore formed in the manifold tray, and having an axis that

is inclined relative to the plane of the tray in a first direction, a connecting bore adjacent an edge of the recess in the manifold cover opening to the bore for the vial, and having a axis generally perpendicular to the axis of the bore, whereby rotating the support about a central axis causes the connecting passageway to drain the cups into the vial holding bores.

21. (Original) The sample recovery device of claim 20, wherein said manifold cover contains passageways for introduction of liquid into the recesses.

22. (Original) The sample recovery device of claim 20, wherein said manifold cover includes passageways for permitting discharge of gases and liquids from the recesses in the manifold cover, and passageways for permitting the introduction of a gas into the recesses of the manifold cover.

23. (Original) An apparatus for handling cup shaped impactor devices comprising a tray having openings for said cup impactor devices, said cup impactor devices having a body that fits through the openings and flanges that engage surface portions of the tray around the openings and prevent the entire cup from passing through the openings, the body of the cup extending through the tray.

24. (Original) The apparatus of claim 23, wherein said tray comprises a generally flat plate with the openings therethrough, and the flanges of the cups being supported on the flat plate.

25. (Original) The apparatus of claim 23 and a cover member for forming a manifold over said tray and cups, said cover member having a passageway that extends transversely across all of the cups, and openings from the passageway to each of the cups, the

passageway being adapted to be fitted to a liquid cleaning material source.

26. (Original) The apparatus of claim 25, wherein said cover has a second passageway open to each of the cups on the tray, and the second passageway being connected to a source of a gaseous fluid.

27. (Original) The apparatus of claim 23 and a cover manifold for said tray comprising a plenum chamber individually open to each of the cups, and an opening above each of the cups for introducing a coating material, said tray being adapted to be rocked about a longitudinal axis with the coating material in place, and the plenum chamber being connected to a source of gaseous fluid for eliminating vapors from the coating material.

28-32. (Canceled)

33. (Currently Amended) A The method of coating an impaction ~~surface formed on the bottom wall of a cup comprising claim 6~~ including the steps of adding a quantity of an anti-bounce coating material into ~~the~~ each cup to cover the impaction surfaces, and providing a flow of drying fluid over the impaction surfaces to remove vapors from solvents in the coating.

34. (Original) The method of claim 33, including rocking the cup so the coating material flows across the impaction surface while drying.

AMENDMENT TO THE SPECIFICATION

Please replace the paragraph commencing on page 1, line 6, with the following:

This application is a divisional application of co-pending U.S. Patent application Serial No. 09/679,936, filed October 5, 2000, now U.S. Patent No. 6,723,568, which was a continuation-in-part of U.S. Patent Application Serial No. 09/567,552 filed May 5, 2000 for Efficient High Productivity Cascade Impactors, now U.S. Patent No. 6,453,758, which claims claimed priority on provisional application Serial No. 60/138,742, filed June 11, 1999, for COMPACT, HIGH-PRODUCTIVITY CASCADE IMPACTORS., and priority is claimed under all of the foregoing applications.